INDEX
TO
VOLUME 6: 1991

TITLE

Allocating processing power to minimize time costs in parallel software systems **Qin, B, Ammar, R A and Sholl, H A** 159

Analysis of trade-offs between centralized and geographically distributed transaction **Dias, D M, Yu, P S and Bennett, B T** 45

Broadcasting cryptosystem in computer networks using interpolating polynomials **Chang, C-C and Wu, T-C** 185

Clustering, comparison and selection of standard synthetic benchmark programs **Dujmovic, J J** 195

Data compaction for bridging faults **Muzio, J C and Serra, M** 131

Design, implementation and evaluation of a fault-tolerant signalling network management system: Part II **Mansor, D, Richardson, P, Dillon, T S and Forward, K E** 211

Data integration methodology for an office environment **Marinos, L, Papazoglou, M P and Christodoulakis, D** 143

Design of a high performance instruction pipeline **Omondi, A R** 13

Fault-tolerant approach to the design of a Signalling Transfer Point: Part I **Richardson, P, Mansor, D, Dillon, T S and Forward, K E** 178

Functional dependencies to enforce integrity constraints in database machine environments **Hurson, A R, Miller, L L, Pakzad, S H and Fan, C** 91

Heuristic deadlock avoidance algorithm in a distributed system **Srimani, P K** 170

Memory performance of microcomputers at large user nodes of distributed systems **Reddi, A V** 85

Occam implementation of an algebra-based language for low-level image processing **Crookes, D, Morrow, P J and McParland, P J** 30

Optimal maintenance resource allocation for multiprocessor systems **Landis, D L and Muha, D C** 54

Parallel Min-cut placement on reduced hardware SIMD architecture **Ravikumar, C P, Sastry, S and Patnaik, L M** 3

PESA-I: a parallel and distributed architecture for production systems **Schreiner, F and Zimmerman, G** 67

Precedence-agreement concurrency control algorithm for distributed database systems **Wang, C and Li, V O K** 227

Reconfigurable transputer-based architecture **Deng, X-L, Dillon, TS and Lew, K** 152

Simulation of load balancing and multitasking in a homogeneous distributed system model **Karatza, H D** 37

Software safety analysis in distributed systems **Shebalin, P V, Son, S H and Chang, C-H** 102

Validation of an approximation technique for queueing network models with chain-dependent FCFS queues **Conway, A E and O'Brien, D** 117

VLSI algorithms for data compression **Ranganathan, N, Mukherjee, A and Bassiouni, M** 238

AUTHOR

Ammar, R A see **Qin, B** 159

Bassiouni, M see **Ranganathan, N** 238

Bennett, B T see **Dias, D M** 45

Chang, C-C and Wu, T-C Broadcasting cryptosystem in computer networks using interpolating polynomials 185

Chang, C-H see **Shebalin, P V** 102

Christodoulakis, D see **Marinos, L** 143

Conway, A E and O'Brien, D Validation of an approximation technique for queueing network models with chain-dependent FCFS queues 117

Crookes, D, Morrow, P J and McParland, P J Occam implementation of an algebra-based language for low-level image processing 30

Deng, X-L, Dillon, T S and Lew, K Reconfigurable transputer-based architecture 152

Dias, D M, Yu, P S and Bennett, B T Analysis of trade-offs between centralized and geographically distributed transaction 45

Dillon, T S see **Deng, X-L** 152

Dillon, T S see **Mansor, D** 211

Dillon, T S see **Richardson, P** 178

Dujmovic, J J Clustering, comparison and selection of standard synthetic benchmark programs 195

Fan, C see **Hurson, A R** 91

Forward, K E see **Mansor, D** 211

Forward, K E see **Richardson, P** 178

Hurson, A R, Miller, L L, Pakzad, S H and Fan, C Functional dependencies to enforce integrity constraints in database machine environments 91

Karatza, H D Simulation of load balancing and multitasking in a homogeneous distributed system model 37

Landis, D L and Muha, D C Optimal maintenance resource allocation for multiprocessor systems 54

Lew, K see **Deng, X-L** 152

Li, W O K see **Wang, C** 227

Mansor, D, Richardson, P, Dillon, T S and Forward, K E Design, implementation and evaluation of a fault-tolerant signalling network management system: Part II 211

Mansor, D see also **Richardson, P** 178

Marinos, L, Papazoglou, M P and Christodoulakis, D Data integration methodology for an office environment 143

McParland, P J see **Crookes, D** 30

index

Miller, L L see **Hurson, A R** 91
Morrow, P J see **Crookes, D** 30
Muha, D C see **Landis, D L** 54
Mukherjee, A see **Ranganathan, N** 238
Muzio, J C and Serra, M Data compaction for bridging faults 131
O'Brien, D see **Conway, A E** 117
Omondi, A R Design of a high performance instruction pipeline 13
Pakzad, S H see **Hurson, A R** 91
Papazoglou, M P see **Marinos, L** 143
Patnaik, L M see **Ravikumar, C P** 3
Qin, B, Ammar, R A and Sholl, H A Allocating processing power to minimize time costs in parallel software systems 159
Ranganathan, N, Mukherjee, A and Bassiouni, M VLSI algorithms for data compression 238
Ravikumar, C P, Sastry, S and Patnaik, L M Parallel Min-cut placement on reduced hardware SIMD architecture 3
Reddi, A V Memory performance of microcomputers at large user nodes of distributed systems 85
Richardson, P, Mansor, D, Dillon, T S and Forward, K E Fault-tolerant approach to the design of a Signalling Transfer Point: Part I 178
Sastry, S see **Ravikumar, C P** 3
Serra, M see **Muzio, J C** 131
Sholl, H A see **Qin, B** 159
Schreiner, F and Zimmerman, G PESA-I: a parallel and distributed architecture for production systems 67
Shebalin, P V, Son, S H and Chang, C-H Software safety analysis in distributed systems 102
Son, S H see **Shebalin, P V** 102
Srimani, P K Heuristic deadlock avoidance algorithm in a distributed system 170
Wang, C and Li, V O K Precedence-agreement concurrency control algorithm for distributed database systems 227
Wu, T C see **Chang, C-C** 185
Yu, P S see **Dias, D M** 45
Zimmerman, G see **Schreiner, F** 67

BOOK REVIEWS

Advances in computers: Vol 30 123
Computer architecture 124
Computer architecture and design 122
Designing large real-time systems with Ada 63
Multiprocessor performance 62
Multivariable feedback design 62
Parallel computers: object-r=oriented, functional, logic 189
Parallel computing '89: advances in parallel computing 190
Parallel processing for supercomputers and AI 124
RISC systems 122
Vector models for data parallel computing 189
VLSI RISC architecture and organization 61

CALENDAR

64, 127, 191

MARKET FORECAST

Bright future for massively parallel computers 125
Healthy future for fault-tolerance 125